

Information Technology Plan

University Systems 03-05 Plan Version B-2

Agency Contact Information

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Agency Description/ Overview

a. Provide the agency's mission statement.

NORTH DAKOTA UNIVERSITY SYSTEM OFFICE

Mission -The mission of the North Dakota University System is to enhance the quality of life of all those we serve and the economic and social vitality of North Dakota through the discovery, sharing and application of knowledge.

b. Briefly describe the programs and services provided by the agency. Generally one or two sentences about each program or service is sufficient.

The State Board of Higher Education (SBHE) is the governing board for the North Dakota University System (NDUS or System). The SBHE consists of seven citizen members, one student member, and one faculty representative. The Board and Chancellor make decisions on issues with system-wide implications in consultation with the Cabinet (composed of the presidents, executive deans and vice-chancellors). The CEOs of the institutions retain their authority in managing campus affairs.

The Chancellor's office supports the SBHE in developing public policy for the System 's governance and in advocating on its behalf.

c. Indicate the size of the agency in terms of number of employees, the number and location of offices or other indicators, which directly relate to the information technology resources required.

The NDUS office is located in the State Capitol in Bismarck. Staff members in the System office include the chancellor, two vice-chancellors, six professional staff, and seven support staff. There is also a vice-chancellor located in Fargo on NDSU's campus and two staff located at Kirkwood Towers.

d. Describe the current use and impact of technology on the delivery of programs and services by summarizing the primary uses of technology within the agency.

* The goals and objectives of the NDUS office must take into account not only the needs of the staff of the NDUS office but also the needs of the members of the SBHE, the 11 campuses and their related entities, students, general public, state agencies, legislators, and others. Providing the highest quality service and communicating with all users and customers requires the use of the latest technologies.

* The NDUS office maintains the student financial aid programs on a mainframe at ITD. We will continue maintenance/change of mainframe program associated with the processing of financial aid programs, to comply with federal and SBHE directives.

* The NDUS office currently uses Microsoft Office suite for its day-to-day operations. Netscape and/or Internet Explorer are used to access e-mail and the World Wide Web. We will continue to update these programs as new versions become available.

* The NDUS office maintains a local area network, which ITD administers through their service. The LAN

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currently has 17 computers connected to it along with 2 printers.

* The NDUS office maintains a website at www.ndus.nodak.edu. We find that this is a very efficient way to keep the various constituents up-to-date on what's going on in the NDUS. The NDUS office will continue to develop the website.

* The NDUS office continually evaluates the need to update PC's along with providing the necessary training.

e. Describe the future use and impact of technology on the delivery of programs and services by summarizing the technology changes that are planned and indicating their effect on agency operations.

* Implementation of ConnectND is critical to allowing the NDUS to provide accurate and timely information to managers and policy makers for decision making; easy access to information to students and general public; support for collaborative programs and services; and opportunities for streamlining work processes.

* See further discussion regarding IT component in Part C.

NORTH DAKOTA UNIVERSITY SYSTEM - COMMON INFORMATION SYSTEMS (NDUS-CIS)

The NDUS-CIS is comprised of the Higher Education Computing Network (HECN) (South Site) at North Dakota State University, (North Site) at the University of North Dakota, the HECN Finance and Administration Systems, and the HECN Student Information Systems, the Interactive Video Network (IVN) and the Online Dakota Information Network (ODIN), which provide common services for the NDUS campuses.

The mission of the NDUS IT units is to provide high quality enabling services to support education in North Dakota.

NDUS-CIS provides a broad based foundation of services for the support of, and enabling of, the education mission of NDUS institutions and other North Dakota educational institutions. These NDUS services range from direct support of educational activity, such as IVN providing a vehicle for the delivery of courses to students, to Financial Services enabling NDUS and its institutions to maintain financial accountability.

The offices of the units providing common services are located at UND and NDSU.

Barriers

NORTH DAKOTA UNIVERSITY SYSTEM - COMMON INFORMATION SYSTEMS

BARRIERS

1.Low population and limited economic growth contribute to budgets, which are stable or falling. Such an environment is a significant factor impacting the development, maintenance and delivery of high quality services for the NDUS.

a. The North Dakota University System will be challenged to provide a networking capacity level that will keep it competitive in the teaching, learning and research environment.

b. NDUS also faces ongoing challenges being competitive with respect to salaries and training in hiring and retaining high quality IT workers.

c. New library, learning, and business systems have high cost entry points relative to population and yet ND customers expect no less quality and convenience than would be found in higher populated areas.

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2. North Dakota Century Code section 49-21-01.1 creates two barriers:

a. It limits the length of time a tenant can be provided telecommunication services while located within a Technology Park or Incubator. This time limit particularly affects anchor tenants who are expected to provide continuity at these facilities.

b. The statute also prohibits private sector use of videoconferencing technologies on the state network, diminishing economic development opportunities for local communities.

3. A more consistent IT architecture throughout the NDUS would provide common ground to build shared or enterprise wide applications. A tendency to look at requirements and problems from a single campus perspective cause difficulty in finding collaborative opportunities that may be more cost effective.

4. There is inconsistency in support of research and innovation in technology. For example, while North Dakota encourages and funds Internet2 use, some rigidity in policies and practices prevent full benefit to meet the goals of the Higher Education Roundtable.

Alignment with Statewide IT Plan

NORTH DAKOTA UNIVERSITY SYSTEM OFFICE

In 1999 the North Dakota Legislative Assembly passed a resolution directing a study to be conducted which would: "address the expectations of the North Dakota University System in meeting the state's needs in the twenty-first century, the funding methodology needed to meet these expectations and needs, and an accountability system and reporting methodology for the University System. An interim committee on higher education of 21 legislators along with 40 leaders from government, education, and the private sector formed the Roundtable. As a result, "A North Dakota University System for the 21st Century" report was created. During the 2001 Legislative Session, legislation was enacted that gives the NDUS greater flexibility.

The NDUS Strategic plan was approved by the SBHE in July 2001, which includes the objectives used to achieve the System's five long-range goals. Each year the SBHE sets long-range goals and objectives and from that, action plans are developed for achieving each objective. These action plans are the basis of the majority of work assignments of the NDUS office staff. The current long-range goals are as follows:

Long-range goal 1: "Take the leadership in ensuring key steps required for implementation of the Roundtable are taken, specifically to develop and recommend (to the legislative and executive branches): (a) a long-term plan for the financing of the NDUS; (b) a resource allocation mechanism; and (c) accountability mechanisms, both performance and fiscal." - (Cornerstone: Funding and Rewards)

This first goal contains a strong IT component in that the objectives relating to this long-range goal requires the use of information systems that contain the most current and reliable data. It is crucial that reliable data sources be utilized to report on the accountability measures to ensure the validity and consistency of the data. Although the current administrative systems are able to provide a good portion of the data, the new ConnectND systems should provide even more consistent data in the future. Without new administrative systems, additional manual efforts will have to be put into place to gather and report data. The long-term financing plan and resource allocation model have been approved by the SBHE at their November 2001 meeting. The first accountability measures report (both fiscal and performance) was published and distributed December 2001. The document is also available on the NDUS website, which provides for unlimited distribution.

Long-range goal 2: "Change policies and procedures to empower campus presidents; grant to the campuses the same conditions being sought for the NDUS." - (Cornerstone: Economic Development Connection and Flexible and Responsive)

There is one objective under this long-range goal that has an IT component and it is objective 2-2 which is to provide leadership and coordination in the development and/or implementation of the ConnectND project. A

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significant amount of time of NDUS office staff will be required for implementation of ConnectND.

Long-range goal 3: "Develop a University System which has intellectual capacity and programs aligned with the needs of the State." - (Cornerstone: Economic Development Connection and Education Excellence)

Create a research and technology transfer environment to support ND's transition into the new economy component - IT will be an important component to this effort; the ConnectND project plays a very important part in this effort. The current system does not adequately support accounting for grant and contract activities. With increased efforts to raise additional external funding, most especially grants and contracts, an administrative system enhancement to support the tracking of applications, awards and monitoring of external fund awards will be critically important.

NDUS Enrollment Management/Service Plan---A new ConnectND system will provide more relevant, timely, comprehensive and accurate management information. This information will be useful for enrollment management purposes. It will allow campuses to better identify trends, available markets, performance concerns, etc... and respond quickly to opportunities and challenges that will improve student recruitment and retention.

Long-range goal 4: "Develop a delivery system capable of making the capacities of the NDUS accessible to all of North Dakota: (a) learning center; (b) distance delivery; (c) collaborative delivery; and (d) duplicated program where appropriate." - (Cornerstone: Economic Development Connection, Education Excellence, and Accessible System)

Objective 4-1 under this long-range goal has an IT component, which is to increase access to educational opportunities throughout the state. At present, the principal electronic delivery technologies used in the NDUS include:

1. IVN - The North Dakota Interactive Video Network (IVN) is a statewide videoconferencing system connecting 57 classrooms in 32 North Dakota communities including 11 NDUS institutions, the State Capitol, the State Hospital, five Tribal colleges, and 23 K-12 schools in the Great Western Network with links to national and global videoconferencing facilities.
2. Online - With the growth of the Internet, online education in the NDUS has grown from 10 to 350 courses in five years (1996-2001). At present, there are five degrees available online plus an Associate in Arts being offered as a collaboration of several NDUS campuses.
3. Satellite - The Medstar Health Education Network is a satellite-based distance education network designed to deliver live one way-video, two-way audio educational programs to rural healthcare facilities throughout the region.
4. Video Conferencing - The use of low bandwidth video conferencing or desktop videoconferencing has been employed by a number of the institutions of the NDUS for the past five years to deliver programs to rural areas.
5. Videotape - Since 1988, UND has been delivering three of its engineering degrees via videotape. This distance education effort is through the Corporate Engineering Degree Program with 36 corporate affiliates. The on-campus lectures are videotaped and the off-campus students attend on-campus laboratories during the summer.

An increased investment in IT for the support of academic and administrative systems will be imperative for the NDUS to continue to serve and grow the number of students served at a distance.

Long-range goal 5: "Cooperate with other participants in collectively moving the agenda of the Roundtable forward." - (Sustaining the Vision)

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There are no objectives under this long-range goal that would have an IT component.

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The four major goals of the NDUS-CIS have components that support the long-range goals of the SBHE.

GOAL 1- Improve NDUS IT-enabled business processes and services. (Supports SBHE Long-Range Goal 1: Take the leadership in ensuring key steps required for implementation of the Roundtable are taken, specifically to develop and recommend (to the legislative and executive branches): (a) a long-term plan for the financing of the NDUS; (b) a resource allocation mechanism; and (c) accountability mechanisms, both performance and fiscal, and SBHE Long-Range Goal 2: Change policies and procedures to empower campus presidents; grant to campuses the same conditions being sought for the NDUS .)

GOAL 2 - Support NDUS infrastructure needs. (Supports SBHE Long-Range Goal 4: Develop a delivery system capable of making the capacities of the NDUS accessible to all of North Dakota: (a) learning centers; (b) distance delivery; (c) collaborative delivery; and (d) duplicated programs where appropriate.)

GOAL 3 - Improve or enhance NDUS collaborative efforts. (Supports SBHE Long -Range Goal 3: Develop a University System which has intellectual capacity and programs aligned with the needs of the State and SBHE Long-Range Goal 5: Cooperate with other participants in collectively moving the agenda of the Roundtable forward.)

GOAL 4 - Provide and manage resources to align with NDUS strategic goals. (Supports SBHE Long-Range Goal 5: Cooperate with other participants in collectively moving the agenda of the Roundtable forward.)

Goals, Objectives and Accomplishments

Accomplishments

NORTH DAKOTA UNIVERSITY SYSTEM OFFICE

IT accomplishments for the NDUS Office are included in PART E, which was allowed as an option in the IT plan instructions.

NORTH DAKOTA UNIVERSITY SYSTEM - COMMON INFORMATION SYSTEMS

HECN North & South

1. In order to provide campuses with better access to reporting data, implemented a NDUS data warehouse of select financial and student indicators.
2. Updated and improved administrative information systems to increase web access, better serve distance education students, interface to additional applications, and to meet federal reporting and other requirements.
3. Developed bandwidth measurement capabilities and a web site, which gives each institution easy access to their utilization. This not only includes raw bandwidth but also a breakout of usage by application including H.323 (video). Coordinated bandwidth controls with ITD for interested campuses that insures the base allocation is not exceeded.
4. Completed an assessment of NDUS Help Desk needs and developed an implementation plan including 800 number service and campus service monitoring. A new employee position was created specifically for the NDUS Help Desk and will be filled by the start of the 2002 Fall semester. The Help Center (Remedy) application has been customized to include the ability to track assets and is in use by MASU and VCSU for

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laptop tracking.

5. Initiated a project to establish top-level Novell and Microsoft top-level directory services for the HECN. A design has been completed and testing of these services will begin during the Fall 2002 semester. When complete, all interested campuses will be sharing directory services and replication, which will improve reliability and facilitate sharing technical support between campuses.

6. Constructed a public portal website and web streaming project of IVN sessions in support of the "ConnectND" project. The portal uses a Content Management System (CMS). A CMS reduces development time, has sophisticated administration panels, allows content providers to work within a structured environment and rapidly deliver content such as articles, links, news, dynamic headlines, information, frequently asked questions, chat, community, file management, a calendar of project activities, overview of decisions made and profiles of project team members.

Student Information Systems

1. Created FE300 to allow loans to transmit using SLND's Commonline mailbox. Modified FE300 by updating the grade level table, changed the award to accept the award letter edit, added special character edits to the address fields, prevented overwriting of the transmit date on re-runs. Updated the transmit date on the application changes, corrected term assignments between semesters, removed \$0 amounts from selection for transmission, added disbursement date edits, allowed expired disbursement dates to pass on re-runs, created a patch and fixed the foreign addresses.

2. Modified FI/FR10 to change selected edits to warnings, corrected a summer calculation error, changed an edit that prevented some data from being entered for scholarship only, revised the operation of the fifth screen, made revisions to allow an independent 's EFC to be adjusted and prevent duplicate applications, updated the prisoner match table.

ODIN

1. Initiated a Request For Proposal (RFP) to library system vendors to replace the existing library management software used by ODIN. Wrote and distributed the RFP to thirteen vendors. ODIN received responses from six vendors. The evaluation process was completed by the end of July 2002 and Ex Libris was selected as the successful vendor to replace the PALS library software used by ODIN.

2. Worked with state-wide library representatives to select a vendor (Electric Library) for state-wide databases funded by the legislature. Negotiated a contract and implemented access to the databases. Continued to improve licensed database authorization methods. Added many libraries to the authorization process for database access bringing the total to more than 125 libraries.

3. Provided common hardware platform and support for NDUS libraries that elected to implement an electronic reserve system.

IVN

1. Purchased and implemented core H.323 video scheduling and bridging technologies to significantly expand IVN's services within NDUS, state and local government, and K-12 schools. Concurrent with the complete technology overhaul, IVN successfully grew from less than 40 sites to nearly 120. Site activations continue with an expected cumulative growth to reach 200 sites in fall 2002.

2. Using the new H.323 video technology, bridged and supported high school classes, dual credit activities, college curriculum and numerous meetings/events. Classes ranged from high school art to college biology to dual credit Spanish. Participating sites ranged from Stanley and Alexander High School in the northwest to the Rugby and Langdon hospitals in the northeast to the Ellendale and Kulm High Schools in the southeast, and all campus locations in between.

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3. Doubled IVN staff size from 5 to 10 FTEs to provide training and support for expanded video services. In cooperation with Edutech and ITD, IVN personnel developed and delivered videoconferencing demonstrations, training/orientation programs, and related materials, including: equipment demonstration and push-button training, site /consortia administrative training, and scheduling training. All higher education campuses, nearly half of the state's K-12 schools, and many state agency representatives participated in these sessions.

4. Championed collaborative efforts within the STAGEnet management structure, the NDUS organizational structure and various video constituencies. Specifically, worked with ITD and EDUTECH to develop an implementation schedule for H.323 video; engaged NDUS IT Coordinators on campus video/LAN issues; participated in Help Desk discussions, both at the HECN and STAGEnet level; coordinated with campus video coordinators, EDUTECH, and ITD in developing guidance and best practice methods for video; and formed an IVN advisory committee

Goals and Objectives

1 Maintain Base Operations

Objective(s)

1 Continue to evaluate the need for replacement of PCs and monitors, and provide training to staff as systems/software are upgraded.

Completion Biennium: Ongoing

Accomplishments /Status:

Listed below are the IT equipment/software purchases since March of 2000: * Replaced 14 computers and 12 monitors * Two older desktop computers were replaced with laptops and docking stations to allow the user to take the computer with them while traveling * One laptop was purchased from surplus for general office use. We had to add a new hard drive and modem/Ethernet card * Replaced the colored printer and front office printer with a faster model and then moved the old printer to an

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3 Continue to evaluate the user needs of the office, the interface needs external to the office and new and improved advances in technology and software. The NDUS office is a small agency that must keep current with the latest technologies in order to communicate effectively with other NDUS office staff, members of the SBHE, the 11 campuses, students, public, state agencies, legislators, and others.

Completion Biennium: Ongoing

Accomplishments /Status:

During the Spring of 2002, the NDUS office installed an H323 system. This technology will allow the NDUS office to communicate with others face-to-face without having to leave the office.

4 Continue to contract with an outside vendor for further website development.

Completion Biennium: Ongoing

Accomplishments /Status:

Some of the changes/updates to the website since March of 2000 have been: * Search/site map capabilities - this area was revamped since there have been many changes since its development. * Policies/Procedures - NDUS procedures - this is a new section to the site - Proposed policies - this is a new section to the site * Calendar - we now have the capability of adding a PDF of the SBHE agenda to the calendar section of the site. * System Services - Technology Information - this section was redesigned into subsections to make it more efficient for the user - ND Workforce Training System - this is a new section to the site, which provides you with a map of North Dakota breaking the state into four workforce training quadrants and the contact information. - eLearning - This is a new section to the site which provides a central location for these type of activities including distance learning (ACCESS), NDUSO which is the information for the North Dakota University System Online degree, etc.

2 Support Long-Range Goals of SBHE

Objective(s)

1 Continue to identify and utilize reliable information system and on-line data sources, including purchasing those that are not available internally, for the preparation of the annual accountability measures report. (SBHE Long-Range Goal 1 - Objectives 1-3 and 1-4)

Completion Biennium: Ongoing

Accomplishments /Status:

Ongoing

2 Provide leadership and coordination for the implementation of the ConnectND project, including release time for key NDUS Office staff during various phases of the project. (SBHE Long-Range Goals 2 - Objective 2-2)

Completion Biennium: 03-05

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4 Develop a delivery system capable of making the capacities of the NDUS accessible to all of North Dakota: (a) learning center; (b) distance delivery; (c) collaborative delivery; and (d) duplicated program where appropriate. - (Cornerstone: Economic Development Connection, Education Excellence, and Accessible System)

Completion Biennium: Ongoing

Accomplishments /Status:

NCA accreditation for NDUSO; Membership in the American Council for Virtual Education (nation-wide database for online education plus marketing options for NDUSO); Creation of NDUSO website to facilitate connections to online courses and programs in the NDUS www.nduso.org; Ongoing discussions with NDUS, the Extension Service, and WorkForce Training to enhance access to learning opportunities

3 System Technology Enhancements for Higher Education Computer Network (HECN), Interactive Video Network (IVN) and On-line Dakota Information Network (ODIN)

Objective(s)

1 Financial resources are needed for upgrades and enhancements to HECN, IVN and ODIN. Examples of outstanding needs include: Alternative delivery methods, including desktop video; On-line courseware management software, servers, training and support; Phase II of data warehouse project; Hi-band networking to continue the same level of service for Internet I and II (replacement of federal funds with state funds); ODIN replacement and replacement of administrative systems. Some of these are specifically addressed in the comprehensive Technology Support Plan for the new ND State Network. Increased resources are needed in support of the ND State Networking Plan (see activity 4).

Completion Biennium: Ongoing

Accomplishments /Status:

See accomplishments listed under Part D for HECN, IVN, and ODIN.

4 NDUS-CIS GOAL 1- Improve NDUS IT-enabled business processes and services. (Supports SBHE Long-Range Goal 1: Take the leadership in ensuring key steps required for implementation of the Roundtable are taken, specifically to develop and recommend (to the legislative and executive branches): (a) a long-term plan for the financing of the NDUS; (b) a resource allocation mechanism; and (c) accountability mechanisms, both performance and fiscal, and SBHE Long-Range Goal 2: Change policies and procedures to empower campus presidents; grant to campuses the same conditions being sought for the NDUS.)

Objective(s)

1 Implement, with state government, the new financial/student/accounting/human resources system, known as ConnectND.

Completion Biennium: Ongoing

Accomplishments /Status:

The 2002 Annual Report for the NDUS Common Information Services (CIS) is currently being finalized

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3 Significantly expand IVN videoconferencing services within the NDUS, state and local government, K-12 schools and non-profit organizations.

Completion Biennium: 03-05

Accomplishments /Status:

5 NDUS-CIS GOAL 2 - Support NDUS infrastructure needs. Supports SBHE Long-Range Goal 4: Develop a delivery system capable of making the capacities of the NDUS accessible to all of North Dakota: (a) learning centers; (b) distance delivery; (c) collaborative delivery; and (d) duplicated programs where appropriate.

Objective(s)

1 Offer reliable, cost-effective and appropriate NDUS network services.

Completion Biennium: Ongoing

Accomplishments /Status:

2 Provide middleware tools and data to help people more easily use networked resources and services with security and privacy.

Completion Biennium: Ongoing

Accomplishments /Status:

3 Enable libraries to provide easy access to licensed electronic information.

Completion Biennium: Ongoing

Accomplishments /Status:

4 Provide IT architecture leadership.

Completion Biennium: Ongoing

Accomplishments /Status:

6 NDUS-CIS GOAL 3 - Improve or enhance NDUS collaborative efforts. Supports SBHE Long-Range Goal 3: Develop a University System which has intellectual capacity and programs aligned with the needs of the State and SBHE Long-Range Goal 5: Cooperate with other participants in collectively moving the agenda of the Roundtable forward.

Objective(s)

1 Fully implement NDUS-wide help desk.

Completion Biennium: Ongoing

Accomplishments /Status:

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3 Collaborate with NDUS campuses, K-12, state and local governments, and libraries to identify appropriate learning and research support systems

Completion Biennium: Ongoing

Accomplishments /Status:

4 Work with ODIN libraries to expand digital holdings.

Completion Biennium: Ongoing

Accomplishments /Status:

5 Promote Internet 2 and advanced networking.

Completion Biennium: Ongoing

Accomplishments /Status:

6 Provide training and support for network videoconferencing user groups.

Completion Biennium: Ongoing

Accomplishments /Status:

7 NDUS-CIS GOAL 4 - Provide and manage resources to align with NDUS strategic goals. (Supports SBHE Long-Range Goal 5: Cooperate with other participants in collectively moving the agenda of the Roundtable forward.)

Objective(s)

1 Identify new, or re-purpose existing, resources to enhance current services, and initiate new services.

Completion Biennium: Ongoing

Accomplishments /Status:

2 Provide professional staff to meet NDUS needs.

Completion Biennium: Ongoing

Accomplishments /Status:

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Major Activities Planned

Activity Number: 1				Activity: Base Operations	
On Going Time Frame					
Priority: 1 Status: Maintenance/Base Operations					
<u>01-03 Est.</u>	<u>03-05 Est.</u>	<u>05-07 Est.</u>	<u>03-05 Base</u>	<u>03-05 Optional</u>	<u>03-05 Non-Appropriated</u>
<u>Cost</u>	<u>Cost</u>	<u>Cost</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>
\$105,698	\$113,140	\$117,400	\$113,140	\$0.00	\$0.00
Description:					
<p>The NDUS office contracts with ITD to administer our local area network (LAN) through their server. The network consists of 17 client workstations and two printers, and all employees have access to word processing and spreadsheet applications, e-mail, and the Internet. In addition, a limited number of employees have access to the mainframe and have user dial-up access. On a regular basis, we evaluate the replacement of computers and the upgrade of software, and replace PC's as budgets allow. The majority of the data processing fees in the NDUS office budget relate to the operation of the mainframe student financial aid programs. The telephone costs for the NDUS office are also included in this activity. The hardware and software budget of the ND State Approving Agency, as well as data processing and telephone costs (\$7,140) is also included in this activity, and is federally funded. The NDUS office will continue to purchase/implement new and improved advances in technology and software (such as the H323 system) and will continue to contract with an outside vendor for further website development to enhance and improve communication and access with its constituents. 03-05 Base Budget includes \$106,000 general funds (NDUS Office) and \$7,140 federal funds (SAA).</p>					
Justification: None					
Impact: None					
Related SIBR Reporting Levels/ Comments:					
System Governance					
<u>Related Objectives</u>					
Goal: 1 Objective: 1					
Goal: 1 Objective: 2					
Goal: 1 Objective: 3					
Goal: 1 Objective: 4					
Goal: 2 Objective: 1					

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Activity Number: 2

Activity: ConnectND

Start Date: 03/2002 End Date: 06/2005

Priority: 3 Status: New Initiative

<u>01-03 Est.</u>	<u>03-05 Est.</u>	<u>05-07 Est.</u>	<u>03-05 Base</u>	<u>03-05 Optional</u>	<u>03-05 Non-Appropriated</u>
<u>Cost</u>	<u>Cost</u>	<u>Cost</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>
\$4,353,321	\$4,140,375	\$5,491,609	\$0.00	\$3,200,000	\$520,375

Description:

Implementation has begun for the new administrative/student/accounting/human resources system, known as ConnectND. This will be a complete replacement of the NDUS administrative software now in use by NDUS campuses as well as the administrative software in use by all state agencies. The software functions cover financial, human resources and student administration systems. The \$3.2 million is part of the technology pool increase in the optional package. If this is funded, a \$26 (per semester) tuition surcharge will not be implemented. Without \$3.2 million state funding, all students will be assessed this surcharge to help pay for the project. Other sources of funding for 2003-05 include \$420,000 from the HECN budget. During 2001-03, the costs were funded as follows: \$850,000 - HECN; \$250,000 - SBHE initiative pool; \$650,000 - 01-03 ERP appropriation (ITD budget); \$2.6 million - Fall 2002 semester tuition surcharge of \$42 per student.

Justification:

In order to support the evolving needs of higher education and improve accountability and efficiency, the new administrative system is crucial. This funding is needed to cover the NDUS implementation costs including position backfill, compensation, training, implementation site costs, customization and hosting in 03-05.

Impact: None

Related SIBR Reporting Levels/ Comments:

System Grant Programs - Technology Pool

Related Objectives

Goal: 4 Objective: 1

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Activity Number: 3

Activity: Support
Impl. of ERP

Start Date: 04/2002 End Date: 03/2004

Priority: 2 Status: Enhancement/Upgrade

<u>01-03 Est.</u>	<u>03-05 Est.</u>	<u>05-07 Est.</u>	<u>03-05 Base</u>	<u>03-05 Optional</u>	<u>03-05 Non-Appropriated</u>
<u>Cost</u>	<u>Cost</u>	<u>Cost</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Description:

The NDUS office will provide leadership and coordination for the implementation of the ConnectND project, including release time for key NDUS office staff during various phases of the project. Costs associated with this activity include salaries and travel expenses. Costs are being absorbed in Activity 1 (Base operations)

Justification:

Will contribute to the successful implementation of the ConnectND project.

Impact: None

Related SIBR Reporting Levels/ Comments:

System Grant Programs - Technology Pool

Related Objectives

Goal: 2 Objective: 2

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Activity Number: 4			Activity: ODIN Maint/Base		
On Going Time Frame					
Priority: 4 Status: Maintenance/Base Operations					
<u>01-03 Est.</u> <u>Cost</u>	<u>03-05 Est.</u> <u>Cost</u>	<u>05-07 Est.</u> <u>Cost</u>	<u>03-05 Base</u> <u>Budget</u>	<u>03-05 Optional</u> <u>Budget</u>	<u>03-05 Non-Appropriated</u> <u>Budget</u>
\$1,932,914	\$2,139,056	\$2,309,915	\$1,032,914	\$0.00	\$1,000,000
Description:					
<p>Maintain support for the ODIN library application, hardware, software, user support and training. Expenses include personnel required to provide applications support to ODIN libraries, equipment for mainframe capacity, disk expansion, and supporting web servers. The 03-05 base budget (\$1,032,914) is included in the technology pool (\$26,142,105) of the NDUS office budget request. During 2001-03, \$609,934 was included for base operations and \$422,980 was included in the technology pool for expanded digital holdings and staff. These costs will continue into the next biennia, and are reflected in this activity as maint/base costs.</p>					
Justification: None					
Impact: None					
Related SIBR Reporting Levels/ Comments:					
System Grant Programs - Technology Pool					
Related Objectives					
Goal: 4 Objective: 2					
Goal: 5 Objective: 1					
Goal: 5 Objective: 3					
Goal: 6 Objective: 1					
Goal: 6 Objective: 3					

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Activity Number: 5

Activity: ODIN
Enhancement

Start Date: 03/2002 End Date: 06/2005

Priority: 5 Status: Enhancement/Upgrade

<u>01-03 Est.</u>	<u>03-05 Est.</u>	<u>05-07 Est.</u>	<u>03-05 Base</u>	<u>03-05 Optional</u>	<u>03-05 Non-Appropriated</u>
<u>Cost</u>	<u>Cost</u>	<u>Cost</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>
\$900,000	\$417,000	\$0.00	\$0.00	\$417,000	\$0.00

Description:

ODIN needs to select and implement a new library management system to replace the PALS software now in use. This will entail licensing of application software, installation of hardware, data conversion to the new system and training from the vendor. The total estimated cost of the replacement is \$1,317,000, consisting of \$900,000 funding from ODIN libraries budgets in 2001-03, and \$417,000 requested in 03-05 optional budget of the NDUS office, as an increase to the technology pool.

Justification:

The library management software currently in use, PALS, will soon become unsupported. The vendor is abandoning the product. ODIN needs to move to new software to continue to provide access to library materials and for library management functions for more than fifty North Dakota libraries including the NDUS libraries, the ND State Library and many public and K-12 libraries.

Impact: None

Related SIBR Reporting Levels/ Comments:

System Grant Programs - Technology Pool

Related Objectives

Goal: 4 Objective: 2

Goal: 5 Objective: 3

Goal: 6 Objective: 4

Information Technology Plan

University Systems 03-05 Plan Version B-2

Activity Number: 7

Activity: IVN
Enhance/Upgrade

Start Date: 06/2003 End Date: 06/2005

Priority: 7 Status: Enhancement/Upgrade

<u>01-03 Est.</u>	<u>03-05 Est.</u>	<u>05-07 Est.</u>	<u>03-05 Base</u>	<u>03-05 Optional</u>	<u>03-05 Non-Appropriated</u>
<u>Cost</u>	<u>Cost</u>	<u>Cost</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>
\$0.00	\$433,000	\$0.00	\$0.00	\$433,000	\$0.00

Description:

IVN provides multipoint control unit capabilities (or bridging services) for videoconferencing on STAGEnet. Bridging services are required for any videoconference that connects more than two sites to an event and a bridge port is required for each site connected to the event. IVN currently operates three bridges with a total port capacity of 102. The \$433,000 increase in the NDUS Office optional budget request (technology pool) will provide upgrades for 3 Accord MCU's, which will provide increased port capacity for K-12 schools, NDUS campuses, ND Tribal Colleges and state agency videoconferencing systems that are likely to be added to STAGEnet between FY02 and FY05.

Justification:

The growth of IVN classrooms and conference rooms is significantly outpacing IVN's bridging capacity. During the first 15 months of H.323 deployment, IVN's ratio of bridge ports to number of sites dropped from 60% to 51%. Another way to look at it is the number of classrooms and conference rooms on IVN grew by 400% while the number of bridge ports grew at a 325% clip. In short, bridge ports will be the most difficult curve for IVN to stay in front of during the 03-05 Biennium. On the first official day of fall semester, 2002, IVN connected 201 sites to 54 conferences. These numbers, staggering in their own right, reflect K-12 schools using video technology for the first time. Many of these schools have scheduled only one or two periods of video activity during the day. As these schools ramp up their video activity to five, six, or seven periods a day - with some schools already discussing plans to add a second video classroom - the demand for K-12 bridge ports is going to rise dramatically. With higher education level, campuses in the NDUS system have added their third video rooms (some campuses operate four or more rooms); tribal colleges are using BRIN grant dollars to augment and expand their video facilities; and NDSU Agriculture and UND School of Medicine continue to invest in video expansion. At the state level, the Department of Human Services and other state agencies are initiating plans to add video facilities. Finally, this activity will help IVN stay abreast of STAGEnet departmental and agency video requirements; it does factor in potential desktop units or expanded off-network bridging requirements. Based on current technology costs, this activity will provide IVN with approximately 72 additional bridge ports.

Impact: None

Related SIBR Reporting Levels/ Comments:
System Grant Program - Technology Pool

Related Objectives

Goal: 3 Objective: 1

Goal: 4 Objective: 3

Goal: 6 Objective: 1

Goal: 6 Objective: 3

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Activity Number: 8

Activity: HECN
NDUS Support

On Going Time Frame

Priority: 8 Status: Maintenance/Base Operations

<u>01-03 Est.</u>	<u>03-05 Est.</u>	<u>05-07 Est.</u>	<u>03-05 Base</u>	<u>03-05 Optional</u>	<u>03-05 Non-Appropriated</u>
<u>Cost</u>	<u>Cost</u>	<u>Cost</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>
\$15,994,771	\$17,672,099	\$19,520,338	\$14,971,475	\$800,000	\$1,200,000

Description:

Provide for the continuation of basic business operations to support NDUS activities. These activities are the foundation of services for the support of, and enabling of, the education mission of NDUS institutions and other North Dakota educational institutions. Implement a system wide coordinated help desk function. Support the research and teaching mission of NDUS institutions by participation in the Internet2 initiative. Procure and update equipment to support this mission. The 03-05 base budget (\$14,971,475) is included in the technology pool (\$26,142,105) of the NDUS office budget request. The optional budget request includes \$800,000 to fund the continuation of base operating costs of HECN and increased software maintenance costs.

Justification: None

Impact: None

Related SIBR Reporting Levels/ Comments:
System Grant Programs - Technology Pool

Related Objectives

Goal: 4 Objective: 1
Goal: 5 Objective: 1
Goal: 5 Objective: 2
Goal: 5 Objective: 4
Goal: 6 Objective: 1
Goal: 6 Objective: 5
Goal: 7 Objective: 2

Information Technology Plan

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Activity Number: 10

Activity: NDUS
Network
Growth

Start Date: 07/2002 End Date: 06/2005

Priority: 12 Status: Enhancement/Upgrade

<u>01-03 Est.</u>	<u>03-05 Est.</u>	<u>05-07 Est.</u>	<u>03-05 Base</u>	<u>03-05 Optional</u>	<u>03-05 Non-Appropriated</u>
<u>Cost</u>	<u>Cost</u>	<u>Cost</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>
\$0.00	\$0.00	\$0.00	\$0.00	\$400,000	\$0.00

Description:

Provide for network growth in the 2003/2005 biennium. Included in optional budget request of NDUS office (technology pool increase)

Justification:

Increasing use of network bandwidth for teaching and delivery of support services (such as IVN and ODIN services) and growing acceptance and use of online services, information and tools by students and faculty are driving the need for expanded services.

Impact: None

Related SIBR Reporting Levels/ Comments:
System Grant Programs - Technology Pool

Related Objectives

Goal: 4 Objective: 3

Goal: 5 Objective: 1

Information Technology Plan

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Activity Number: 11

Activity:
NDUSO Office

On Going Time Frame

Priority: 13 Status: Maintenance/Base Operations

<u>01-03 Est.</u>	<u>03-05 Est.</u>	<u>05-07 Est.</u>	<u>03-05 Base</u>	<u>03-05 Optional</u>	<u>03-05 Non-Appropriated</u>
<u>Cost</u>	<u>Cost</u>	<u>Cost</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>
\$498,200	\$578,550	\$607,425	\$498,200	\$80,350	\$0.00

Description:

Funding for base operations (staff and operating) of Distance Education Coordinator and funding to support the following: ongoing training/development for Learning Center personnel; system-wide online tutorial support; continuing assessment of general education in the online environment; co-underwrite the development of certificate, two-year, four-year, and graduate online programs; cooperative with campuses in providing training and upgrading in online teaching through system workshops and seminars; provide resources for access to HTML eZ or direct underwriting of development costs; membership to support national web site for distance learning opportunities. The \$80,350 (in the optional budget) provides a 5% increase over the FY03 operating level, and enhanced investment in underwriting the development of on-line collaborative degrees including two-year, four-year, and graduate.

Justification: None

Impact: None

Related SIBR Reporting Levels/ Comments:

System Grant Programs - Technology Pool

Related Objectives

Goal: 5 Objective: 1

Goal: 6 Objective: 1

Goal: 6 Objective: 2

Goal: 6 Objective: 3

Goal: 7 Objective: 1

Goal: 7 Objective: 2

Hardware Assets and Replacement Schedule

Category	Age	OS	Ownership	Current Quantity	Expected increase/ decrease 01-03	Expected increase/ decrease 03-05	Replacement %	Replacement # of Years	Comments

***Information Technology Plan
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IT Staffing Plan

Detail Plan for Staffing

Function	% ITD, HECN, or other agency	null % ITD, HECN, or other agency	Contractor %	null Contractor %	Internal %	null Internal %	Internal FTE	Internal FTE null	Comment
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